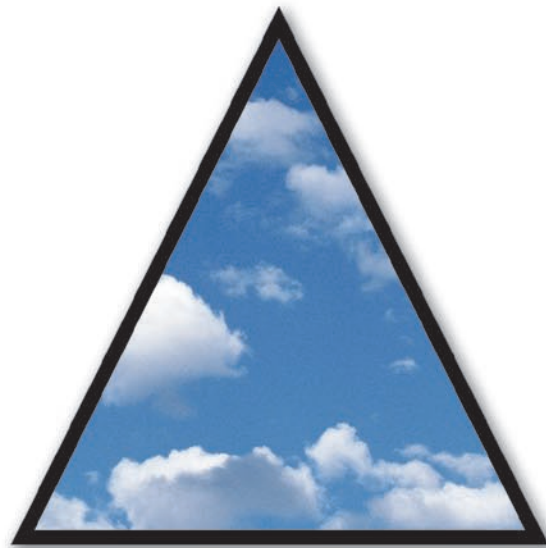


Exporting Environ

When Business and the Planet Both Profit



by William Corley
Export America

In this modern technological era, few people would deny that we live in a complex, multilayered world. From cultures to economies, there is an interconnection within our global society that complicates our activities but also leads us to seek out basic similarities. Even the complexity and multiplicity of our natural environment seem to require a simplified, logical explanation. Atomic theory and mathematical calculation are tools that, even in their most advanced applications, simplify and explain the world around us.

The age-old drive to reduce our complex surroundings to a comprehensible state follows many traditions, particularly those of classical Greece. Empedocles, a Greek philosopher of the fifth century B.C., identified four immutable, eternal substances or elements that formed the physical universe and gave the appearance of

change through infinite combinations: earth, air, fire, and water. This pre-Socratic view of matter influenced scientific thought for more than 2,000 years, perhaps in part because of its comforting rationalization of our complex world.

Although modern science has developed other environmental theories and technologies, earth, air, fire, and water still symbolize some of the most significant aspects of life on our planet. Humankind's expanding industry and growing population threaten the delicate ecological balance of the world. As globalization of economic and social development accelerates, major environmental challenges have arisen—from seemingly rapid ecological degradation in some regions to elusive sustainable development in others. Technologies that address issues such as soil conservation (earth), wind power (air), energy (fire), and desalination (water) are among the many fascinating and

apparently surmountable challenges of the new millennium.

A GLOBAL PERSPECTIVE

Previous civilizations noticed the interconnectedness of forms of matter and guessed at, or specified, higher meanings. However, the ancient world was a collection of small, disparate societies. We now live in a large, global community. The environment encompasses not only worldwide businesses but also global problems, including widespread disease and poverty, vexing urban air pollution, and increasing demands on scarce natural resources. It makes sense, then, that exports of environmental technologies have tremendous commercial promise as well as immense potential for ameliorating some of our greatest human development troubles. For instance, an improvement in one developing country's water management and wastewater treatment could save thousands of lives through eradication of simple but deadly water-borne

mental Technology



illnesses. Likewise, if every person in the developing world had clean water for drinking and sanitation, approximately 2 million lives would be saved annually—and half a million due to grievous diseases prevented.

Water, however, is not the only substance that environmental products and services can improve. Clean coal technologies may ultimately clear our skies, reduce the incidence of lung disease, and cut emissions that evidently raise atmospheric temperature. Meanwhile, our wetlands are increasingly preserved or restored and actually used to treat wastewater in inexpensive and naturally effective ways. Such wetlands use has numerous side benefits—for example, preservation of diverse habitats and prevention of flooding.

ECOLOGY AND ECONOMICS

Economic development need not be bad for the environment; commerce need not lead poor countries to increasing environmental problems. It

is a mistake is to assume simply that economic growth leads to urbanization, industrialization, and higher energy consumption—without regard for the environment. Likewise, it is a myth that developing countries will automatically use the least expensive, most ecologically damaging sources of energy.

Poor countries have vast natural resources that, if coupled with appropriate technology, might concurrently address economic development and environmental concerns. For instance, poor countries have no shortage of wind, and wind power creates no harmful emissions. Advances in wind power technology in recent years have made it more competitive with traditional energy sources that burn fossil fuels. If all the external costs—such as pollution cleanup, agricultural yields, and health care—of carbon emissions from coal and gas-fired energy plants are calculated, wind power actually is significantly cheaper than traditional

power. Wind power, along with fuel-cell technology, does not require large-scale plants, although both China and India have benefited from vast wind farms.

The global community, linked not only by common air and water but also expanding trade and cyberspace, must increasingly find ways to harness such environmental technologies. The export of environmental technologies represents an important step in resolving the greatest developmental challenges of human history. Progress can be based on careful application of technologies and use of resources—a balance that the ancient Greeks would have appreciated. ■